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# Impact of Macroeconomic Variables, American Stock Market Index and Covid-19 Pandemic on Indonesia Capital Market Development (Time Series Study 1990-2020)

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## Abstract

The purpose of this study is 1.) To analyze the influence of foreign investment on the development of the Indonesian capital market. 2.) To analyze the influence of the Exchange Rate on the Development of the Indonesian Capital Market. 3.) To analyze the influence of the Interest Rate on the Development of the Indonesian Capital Market. 4.) To analyze the influence of the Dow Jones Stock Market Index on the Development of the Indonesian Capital Market. 5.) To analyze the influence of the Covid-19 Pandemic (dummy variable) on the Development of the Indonesian Capital Market. 6.) In this study, secondary data and library research were used as a technique for collecting data, using semi-annual data for the period 1990-2020. The research was processed using the EVIEWS 11 program with the multiple linear regression method. The results of the research are known if 1.) Foreign Direct Investment has a significant and positive effect on Capital Market Development. 2.) Exchange Rates have a significant and positive influence on the Development of the Indonesian Capital Market. 3.) Interest Rates have a significant and negative effect on the Development of the Indonesian Capital Market. 4.) The Dow Jones Stock Market Index has a significant and positive effect on the Development of the Indonesian Capital Market. 5.) The Covid-19 pandemic had a significant and negative effect on the Development of the Indonesian Capital Market in the period 1990 to 2020. The results of this study are expected to contribute to policy holders regarding the role of macroeconomic variables on the development of the capital market, so that in the future it can be one of the references in conducting the policy mix so as to improve the development of the Indonesian capital market.

**Keywords:** FDI, Exchange Rates, Interest Rates, Stock Market Indices, Capital Markets, Covid-19

## 1. Introduction

Lately, the development of the capital market in Indonesia has been so fast, making capital market players aware that this trade can provide good returns and contribute greatly to economic development in Indonesia. The

number of companies that go public and register their shares in the capital market is evidence of this condition. This, either directly or indirectly, can support the growth of the national capital market industry to an encouraging level. Based on Article No. UUPM. 8 of 1995, it is explained that the capital market is activities related to public offerings and securities trading, public companies related to issued securities, as well as institutions and professions related to securities and securities or securities, which include debt acknowledgments, commercial securities, stocks, bonds, proof of debt, participation units in collective investment contracts, futures contracts on securities, and each derivative of securities.

The capital market for companies does not only offer benefits. The capital market is also an investment venue for investors, those who have excess funds, to be able to invest capital hoping to get a return. Investors can determine which company to invest in in order to get optimal profit. The development of the capital market as an investment tool institution has economic and financial functions that are increasingly needed by the community as the preferred medium and fundraiser. Investors who carry out transactions on the stock exchange to decide in determining a portfolio that can reap profits, investors need information. Announcement of stock split or stock split is part of the information provided. A Go Public company that carries out activities with the aim of increasing the total outstanding shares is called a stock split.

Based on the Capital Market Law no. 8 of 1995 concerning the Capital Market, namely that the capital market is "Activities related to Public Offering and trading of Securities, Public Companies relating to issued Securities, as well as institutions and professions related to Securities." According to this definition, the capital market is a place to facilitate funding for companies with parties who want to invest, therefore the capital market requires investors both from within and outside the country. The following is a graph of the share of ownership of local investors and foreign investors listed at the Indonesian Central Securities Depository.



Figure 1: Share Ownership Portion of Local and Foreign Investors 2017-2020

Source: Indonesian Central Securities Depository (KSEI), processed

Based on the graph, as of the end of July 2020 the total asset value of foreign investors' shares was IDR 3,111 trillion or 51.9% of the total market capitalization of the IDX at the end of July 2020. Where, local investors only contributed 45% of share ownership, and especially if withdrawn up to 13 years ago, the ownership ratio of domestic investors was only 31%. In addition, foreign investors are more focused on large market cap stocks or blue chips, which in terms of their movements are not so aggressive.

According to research from (Ratnaningtyas, 2020) it was found that foreign capital directly affected significantly the composite stock price index (JCI), in line with this research from (Almfraji & Almsafir, 2014) found that foreign investment had a significant positive influence on the capital market. and the money market in Malaysia which in turn has an influence on economic growth in Malaysia. Including supporting the research above, research from (Hailemariam & Guotai, 2014) results in that Foreign Direct Investment (FDI) has a positive and significant impact on economic growth and capital markets in China. However, not in line with previous research, research from (Idenyi et al., 2016) regarding the impact of foreign investment in the Nigerian stock

market, the results show that foreign investment does not significantly affect the growth of the stock market in Nigeria.

Indications for the developing capital market use the Indonesia Composite Index (JCI) indicator, while the JCI is strongly influenced by national and global economic conditions, including the COVID-19 pandemic which raises positive sentiments such as the vaccination program or negative sentiment or uncertainty due to the emergence of the covid variant. The following is a graph of the JCI for the last few years in Indonesia:

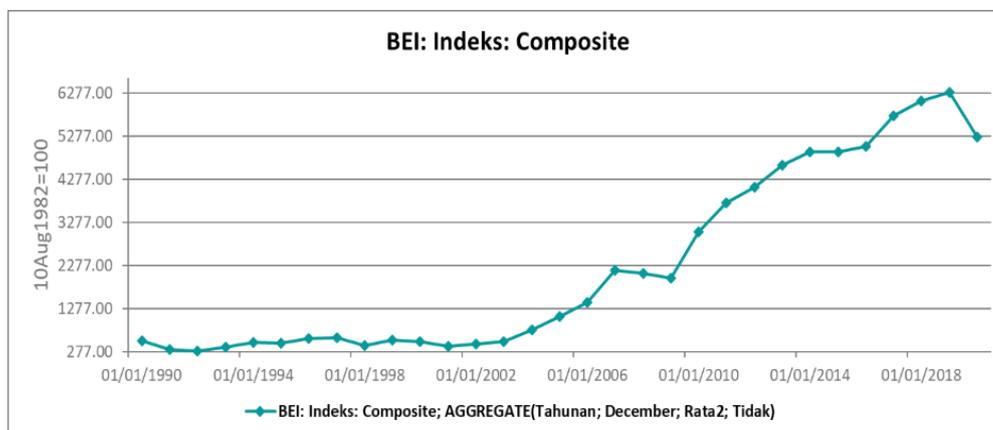


Figure 2: Graph of Composite Stock Price Index (JCI) 1990-2018

Source: Indonesia Stock Exchange, processed

The Indonesian Composite Index chart from year to year shows a trend of development with the highest number reaching 6296, this is certainly encouraging because it means that the capital market in Indonesia is showing a positive direction of progress. This research will examine the effect of stock indexes from other countries, in this case the Dow Jones Stock Index (USA) on the Indonesian Composite Stock Price Index (CSPI). The Dow Jones (USA) Stock Index was chosen because of the longstanding cooperative relationship between Indonesia and the United States in terms of economy, education, culture, health and others. So it does not rule out the possibility of a relationship between the two stock markets, both in America and in Indonesia.

The research of (Lee et al., 2012) examines how closely the relationship between the Taiwan capital market and other international capital markets in Asia is, and it is found that there is a relationship between the Taiwan capital market and the Hong Kong capital market. The resilience of the capital market itself can be shown by various indicators such as the stock index of the corporation concerned, transaction volume, transaction frequency, transaction value, investment amount and various other indicators. Several previous studies have shown that there is an influence of several macroeconomic indicators on capital market developments such as GDP, capital market liquidity, foreign direct capital, inflation rates, savings rates (Azeez & Obalade, 2018). The effect of foreign exchange rates on capital market developments (Mukupo, 2019), (Adebowale & Akosile, 2018) and (Obura & Anyango, 2016).

In line with foreign investment entering the Indonesian capital market, of course, fluctuations in the exchange rate greatly affect foreign investment entering the country. The most important thing about the rupiah exchange rate is the volatility of the rupiah exchange rate concerned. The volatility of the currency exchange rate will result in the financing of business activities, especially companies that focus on exports and imports. The movement of the rupiah exchange rate tends to be influenced by basic factors and the strengthening of the rupiah exchange rate as a reaction to global economic conditions.

The Covid-19 pandemic has caused economic uncertainty and has led to a global economic recession, as is the case for Indonesia. In 2020, during the first and second semesters, there was negative economic growth in various countries, such as the US, Japan, South Korea, the European Union, Hong Kong and Singapore. Indonesia's economic growth performance in 2020 slowed down due to the Covid-19 pandemic. Business actors who will really feel the impact of the domino effect because the pandemic has an impact on the health sector to social and

economic problems. Based on BPS data, the economic growth rate in 2020 from January to March (first quarter) reached 2.97%. When compared to 2019 in the fourth quarter, this figure slowed from 4.97%. Moreover, compared to 2019 in the first quarter, it was still much lower at 5.07%. Furthermore, in 2020, precisely in the second quarter, there was minus 5.32% in Indonesia's economic growth rate. This figure is the opposite of what happened in 2019 to be precise in the second quarter of 5.05%.

From the relevant background, the formulation of this research is:

1. Is there any influence of Foreign Investment on the Development of the Indonesian Capital Market.
2. Is there any influence of the Exchange Rate on the Development of the Indonesian Capital Market.
3. Is there any influence of Interest Rates on the Development of the Indonesian Capital Market.
4. Is there any influence of the Dow Jones Stock Market Index on the Development of the Indonesian Capital Market.
5. Is there any effect of Covid-19 on the Development of the Indonesian Capital Market.

## **2. Literature Review**

### *2.1. Indonesian Capital Market Development*

The financial market in transacting long-term funds as well as being a concrete market is the understanding of the capital market. A place used for marketing stocks and bonds whose sales proceeds can be used as additional funds or in strengthening the company's capital (Fahmi, 2012). While in Law no. 8 of 1995 there is also an explanation of the capital market which is explained as activities related to public offerings and securities trading, companies related to securities issuance, and agencies and professions related to issued securities, and agencies and professions related to securities.

### *2.2. Foreign Direct Investment*

Is part of foreign investment which foreign investment is divided into Foreign Direct Investment and Foreign Portfolio Investment. Foreign Direct Investment is capital owned and managed by foreign parties while Foreign Portfolio Investment is investment funded with foreign money but managed by domestic parties (Mankiw, 2011). Meanwhile, according to Jhingan (Jhingan, 2012) foreign investment (PMA) means companies from the country of origin of capital with de facto or de jure supervision of assets invested in the recipient country; creation of a company using majority shareholding; the creation of a company funded by the investment company or placing fixed assets in the recipient country.

### *2.3. Currency Exchange Rates*

According to (Adiningsih, 2011), the rupiah exchange rate is the price of the rupiah in other countries' currencies. so that the rupiah exchange rate is the value of one rupiah currency which is translated into another country's currency. For example, the exchange rate of the Rupiah to the US Dollar, the exchange rate of the Rupiah to the Yen, and so on. The exchange rate is one of the parameters that affect activities in the stock market or money market because investors usually become more careful in investing.

### *2.4. Interest Rate*

Interest rates are divided into nominal and real interest rates. Interest rates that do not pay attention to the inflation rate (showing the amount of money that is increasing in savings) are the meaning of nominal interest rates. While the interest rate that has taken into account the inflation rate (reflecting the increase or decrease in the purchasing power of savings) is called the real interest rate. The real interest rate is the nominal interest rate minus the inflation rate (Mankiw, 2011). The risk free rate minus inflation is usually used as a reference for real interest rates.

### 2.5. Dow Jones Stock Market Index (USA)

The Dow Jones Industrial Average (DJIA) is an index of the 30 largest publicly traded companies in the United States. These companies include: AT&T, Boeing, Chevron, Coca-Cola, General Electric, Intel, IBM, JP Morgan Chase, McDonalds, Microsoft, Nike, Verizon, Visa, Wal-Mart and Disney. The composition of the index changes periodically to include the strongest companies and discard companies that have lost position and influence. (Bodie & Kane, 2018)

### 2.6. Hypothesis

Moving on from the background that has been described, the following hypotheses can be formulated:

Hypothesis 1: Foreign Direct Investment has a significant and positive influence on the Development of the Indonesian Capital Market

Hypothesis 2: Exchange Rates have a significant and positive influence on the Development of the Indonesian Capital Market

Hypothesis 3: Interest Rates have a significant and negative influence on the Development of the Indonesian Capital Market

Hypothesis 4: The Dow Jones (USA) Stock Market Index has a significant and positive influence on the Development of the Indonesian Capital Market

Hypothesis 5: The Covid-19 pandemic has a significant and positive impact on the development of the Indonesian capital market

## 3. Methods

The data used in this study is secondary data where the collection uses time series data for 30 years, namely from 1990-2020 with data divided per semester. The data collected by the researchers came from various sources related to the research theme, namely the Central Statistics Agency, Bank Indonesia, the World Bank and the Indonesia Stock Exchange.

Variable measurement method and operational definition used is a causal relationship model between the independent variable and the dependent variable. A statement explaining the Agreement method "When two or more cases of a given phenomenon have one and only one condition in common then that condition may be regarded as the cause of the phenomenon" is the opinion of John Stuart Mill in (Yuyun, 2013) The theorem of agreement in this study can be formulated by:

Capital Market Development = Y, the function of the dependent variable is an intermediate variable that gets simultaneous influence by the determining factors, then the model format becomes:

$$Y = f(X_1, X_2, X_3, X_4, X_5)$$

The regression analysis technique in this study uses an approach with an equation model, namely:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \epsilon_t$$

With :

$\beta_0, \dots, \beta_n$  = Constant Equation 1 to n

$\epsilon_1, \dots, \epsilon_n$  = Standard Error equation 1 to n

Y = Capital Market Development

X<sub>1</sub> = Foreign Direct Investment (FDI)

X<sub>2</sub> = Rupiah to US Dollar Exchange Rate

X<sub>3</sub> = Interest rate

X<sub>4</sub> = Stock Index

X<sub>5</sub> = Covid-19

Multicollinearity test using matrix correlation test (Gujarati, 2013), Normality test using Jarques-Berra (Gujarati, 2013), Autocorrelation using Langrange Multiplier or Breusch Gordfrey test (Gujarati, 2013), detecting heteroscedasticity using White Heteroskedasticity Test (Gujarati, 2013). To find out whether the time series data

used is stationary or not, the stationary test (unit root test) is used. In research, basically time series data often experience non-stationary at the series level. So it is necessary to do differentiation once or twice to produce stationary data. The unit root test was carried out using the Augmented Dickey Fuller (ADF) method. Simultaneously test the hypothesis using the F statistical test with a 95% confidence level, so that the alpha precision level is 0.05. Partial hypothesis test using t-test with alpha 0.005. The coefficient of determination (R<sup>2</sup>) is used to measure the model's ability to explain the independent variables (Gujarati, 2013)

## 4. Result

### 4.1 Unit Root Test and Classical Assumptions

Testing the unit root group at the 1st difference level for all variables using the ADF (Augmented Dickey-Fuller) method produces the ADF value for the Foreign Direct Investment variable of 11.42427 with Prob. the value of 0.0000  $\leq$  0.05, the ADF value for the variable exchange rate of the rupiah against the US dollar is 5.142634 with Prob. The value is 0.0001  $\leq$  0.05, the ADF value for the interest rate variable is 5.417775 with Prob. The value is 0.0000  $\leq$  0.05, the ADF value for the Dow Jones stock index variable is 6.725290 with Prob. The value of 0.0000  $\leq$  0.05 and the ADF value for the capital market development variable is 8.224303 with Prob. value 0.0000  $\leq$  0.05 at that level. Thus, it is stated that all stationary variables at the resulting level and equations are cointegrated, or do not produce spurious regression for the three models. The results of the classical assumption test stated that the three models had met the criteria of normality, multicollinearity, autocorrelation, and heteroscedasticity or were declared to meet the criteria.

### 4.2 Descriptive Analysis

Based on data from the World Bank, foreign direct investment in Indonesia during the 30 (thirty) research period 1990-2020 with semester data contained 62 (sixty-two) research samples. Research data on Indonesian Foreign Direct Investment (FDI) during 1990-2020 has an average value of USD1980.146 million. The highest FDI value was recorded at USD7371,456 million in Semester I of 2019 and the lowest value of FDI was recorded at USD-9329.41 million in Semester II of 2016. Based on data from Bank Indonesia, the exchange rate of the rupiah against the US dollar during the 30 (three) study period twenty) years 1990-2020 with semester data there are 62 (sixty-two) research samples. Research data on the Rupiah Exchange Rate against the US Dollar during 1990-2020 has an average value of Rp. 8,550.66/1 USD . The highest Rupiah exchange rate against the dollar was recorded at Rp. 14,900/1 USD in the first semester of 1998 and the lowest rupiah exchange rate against the dollar was recorded at Rp. 1.832/1 USD in Semester I of 1990.

Based on data from Bank Indonesia, the interest rate during the 30 (thirty) research period 1990-2020 with semester data contained 62 (sixty two) research samples. Interest rate research data for 1990-2020 has an average value of 17.01%. The highest interest rate was recorded at 34.75% in the second semester of 1998 and the lowest interest rate was recorded at 9.15% in the second semester of 2020.

Dow Jones Stock Market Index research data for 1990-2020 has an average value of 11,174.90. The highest Dow Jones Stock Market Index was recorded at 24,719 in Semester II of 2017 and the lowest Dow Jones Stock Market Index was recorded at 2581.88 in Semester II of 1994. Research data on the Composite Stock Price Index for 1990-2020 has an average value of 2308, 98 . The highest Composite Stock Price Index was recorded at 6358.63 in Semester I of 2019 and the lowest Composite Stock Price Index was recorded at 247.39 in Semester II of 1991.

### 4.3 Inferential Analysis

The influence of Foreign Direct Investment, the Rupiah exchange rate against the US Dollar, interest rates, the Dow Jones stock market index and Covid-19 either simultaneously or partially on Capital Market Developments as proxied by the Composite Stock Price Index (JCI). Through multiple linear regression which shows the causal relationship between the independent variables and the dependent variable are as follows:

Model Equation :

$$Y = b_0 + b_1 \text{Ln}_X1 + b_2 \text{Ln}_X2 + b_3 \text{Ln}_X3 + b_4 \text{Ln}_X4 + b_5 X5 + \epsilon$$

Where :

Y = Capital Market Development (JIC)

bo = Constanta

X1 = Foreign Direct Investment

X2 = Rupiah Exchange Rate against US Dollar

X3 = Interest Rate

X4 = Dow Jones Stock Market Index (USA)

X5 = Covid 19 Pandemic (Dummy Variable)

€ = Epsilon (Other factors outside model 1)

Dari Model Regresi diperoleh Persamaan Regresi Terstandarisasi

Table 1: Multiple Linear Regression Model

Dependent Variable: LnY

Method: Least Squares

Date: 09/13/21 Time: 09:00

Sample: 1 62

Included observations: 62

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.901072	0.834526	2.278025	0.0266
LnX1	0.128257	0.043969	2.916972	0.0051
LnX2	0.426223	0.113756	3.746829	0.0004
LnX3	-1.455789	0.300724	-4.840942	0.0000
LnX4	0.269678	0.111508	2.418457	0.0189
X5	-0.176061	0.066150	-2.661528	0.0101
R-squared	0.811336	Mean dependent var		3.137561
Adjusted R-squared	0.794491	S.D. dependent var		0.482795
S.E. of regression	0.218866	Akaike info criterion		-0.108946
Sum squared resid	2.682537	Schwarz criterion		0.096906
Log likelihood	9.377325	Hannan-Quinn criter.		-0.028123
F-statistic	48.16469	Durbin-Watson stat		0.792584
Prob(F-statistic)	0.000000			

Source: Eviews11, processed

The results of the calculations in Table 1 above can be presented with the results of multiple linear regression as follows:

$$\text{LnY} = 1.901072 + 0.128257 \text{LnX1} + 0.426223 \text{LnX2} - 1.455789 \text{LnX3} + 0.269678 \text{LnX4} - 0.176061 X5$$

The interpretation of the regression equation is as follows:

The constant value = 1.901072 means that statistically if all ceteris paribus variables have a constant value, then the value of Capital Market Development (CSPI) is 1.901072.

The regression coefficient value  $b_1 = 0.128257$ , meaning that the elasticity value of the Foreign Direct Investment value to the Development of the Indonesian Capital Market (IHSG) is  $E = 0.128257$ . The value of  $E < 1$  indicates that the increase in the value of Foreign Direct Investment is Inelastic to the Development of the Indonesian Capital Market (IHSG). Statistically, the significance of the value of Foreign Direct Investment (FDI) on the JCI is smaller than (0.0051 0.05), it can be concluded that the Foreign Direct Investment (FDI) variable on the Development of the Indonesian Capital Market (JCI) has a significant effect.

The value of the regression coefficient  $b_2 = 0.426223$ , meaning that the elasticity value of the Rupiah to US Dollar exchange rate against the Development of the Indonesian Capital Market (IHSG) is  $E = 0.426223$ . The value of  $E < 1$  indicates that the increase in the exchange rate of the Rupiah to the US Dollar is Inelastic to the Development of the Indonesian Capital Market (IHSG). Statistically, the significance of the Rupiah exchange rate against the US dollar against the JCI is less than (0.0004 < 0.05), so it can be concluded that the rupiah exchange rate against the US dollar has a significant effect on the development of the Indonesian capital market (IHSG).

The regression coefficient value  $b_3 = 1.455789$ , meaning that the elasticity value of the Interest Rate value to the Development of the Indonesian Capital Market (IHSG) is  $E = 1.455789$ . The value of  $E > 1$  indicates that the increase in the value of the Interest Rate is Elastic on the Development of the Indonesian Capital Market (IHSG). Statistically, the significance of the interest rate on the JCI is less than (0.0000 < 0.05), it can be concluded that the interest rate variable on the development of the Indonesian capital market (CSPI) has a significant effect.

The value of the regression coefficient  $b_4 = 0.269678$ , meaning that the elasticity of the value of the Dow Jones Stock Market Index (USA) to the Development of the Indonesian Capital Market (IHSG) is  $E = 0.269678$ . The value of  $E < 1$  indicates that the increase in the value of the Dow Jones Stock Market Index (USA) is Inelastic to the Development of the Indonesian Capital Market (IHSG). Statistically, the significance of the Dow Jones Stock Market Index value on the JCI is smaller than (0.0189 < 0.05), it can be concluded that the Dow Jones Stock Market Index variable on the Indonesian Capital Market Development (CSPI) has a significant effect.

The regression coefficient value is  $b_5 = 0.176061$ , meaning that the elasticity value of the Covid-19 Pandemic on the Development of the Indonesian Capital Market (IHSG) is  $E = 0.176061$ . The value of  $E < 1$  indicates that the value of the Covid-19 Pandemic is Inelastic to the Development of the Indonesian Capital Market (IHSG). Statistically, the significance of the Dow Jones Stock Market Index value on the JCI is less than (0.0101 < 0.05), so it can be concluded that the Covid-19 Pandemic Influence on the Development of the Indonesian Capital Market (JCI) has a significant effect.

F-statistical test is used to determine the relationship between the independent variables jointly affect the dependent variable. The calculation results obtained in table 1 are a significance value of 0.0000 < 0.05 which means a significant effect, indicating that the Foreign Direct Investment (FDI) variable, the Rupiah exchange rate against the US Dollar, interest rates, the Dow Jones (USA) stock market index ) and the Covid-19 pandemic simultaneously had a significant effect on the Development of the Indonesian Capital Market. Interpretation in the language of economics means significant meaning that the Foreign Direct Investment (FDI) hypothesis, the Rupiah exchange rate against the US Dollar, interest rates, the Dow Jones (USA) stock market index and the Covid-19 pandemic have convincingly and proven to influence capital market developments. Indonesia.

The magnitude of the influence of the value of Foreign Direct Investment (FDI), the exchange rate of the Rupiah against the US Dollar, interest rates, the Dow Jones stock market index and the Covid-19 pandemic simultaneously have a significant effect on the Development of the Indonesian Capital Market and is shown by the regression results of the five independent variables on the The development of the Indonesian Capital Market is Adjusted R Squared = 0.794491, meaning that the magnitude of the influence of Foreign Direct Investment (FDI), the Rupiah exchange rate against the US Dollar, interest rates, the Dow Jones (USA) stock market index and the Covid-19 pandemic simultaneously affect significantly to the Development of the Indonesian Capital Market as proxied by the JCI of 79.44 percent, the remaining 20.55 percent is influenced by other factors outside the model studied.

#### *4.4 Discussion*

As of the end of July 2020, the total asset value of foreign investors' shares was IDR 3,111 trillion or 51.9% of the total market capitalization of the IDX at the end of July 2020. Where, local investors only contributed 45% of share ownership, and especially if withdrawn until 13 years ago the ratio domestic investors' ownership is only 31%. In addition, foreign investors are more focused on large market cap stocks or blue chips, which in

terms of their movements are not so aggressive. Supporting foreign capital directly has a significant positive effect on capital market development, including (Ratnaningtyas, 2020), (Almfraji & Almsafir, 2014) and (Hailemariam & Guotai, 2014).

The exchange rate itself is able to affect the stock market through several channels, currency depreciation causes a decrease in stock prices, creating an opportunity for investors to buy shares so that by itself it will increase the stock price itself. In addition, currency depreciation can also cause a lot of foreign capital inflows into Indonesia and invest through the Capital Market which can eventually increase the composite stock price index in Indonesia. The results of this study are supported by previous research, including research by (Narayan, P. K., Devapura, N., & Wang, 2020), (Adebowale & Akosile, 2018), (Obura & Anyango, 2016)

The effect of interest rates and investment is evident from the situation when interest rates are low, the total investment will increase. On the other hand, if the interest rate is high, the total investment will fall. In line with this, it can be seen in the graph of the Indonesian JCI which has increased every year, meaning that there is an increase in investment in line with the decline in Bank Indonesia interest rates. The results of the study are supported by (Hwa et al., 2016), (Poudel et al., 2020) and (Gao et al., 2021)

The Dow Jones Index (DJIA) is one of the 3 major indices in the United States. The other indexes are the Nasdaq Composite and the Standard & Poor's 500. These indexes represent the economic activity in the United States. This index can describe how the American economy is performing. According to (Sunariyah, 2013), with the increase in the Dow Jones Index, this means that the United States' economic performance has also improved. The movement of the Dow Jones index will also affect the movement of the JCI. Because as one of Indonesia's export destinations, the United States' economic growth can encourage Indonesia's economic growth through export activities and capital inflows, both direct investment and through the capital market. Previous studies that support the relationship between the stock market index and other stock indices include research by (Lee et al., 2012) and (Josphat & Kipkirong, 2012).

The performance of the JCI (Joint Stock Price Index) itself was affected by the Covid-19 pandemic, so that in 2020 it experienced negative returns of minus 5.09% and reached its lowest position in March 2020 at 3,911.72. Previous studies that support include ((He et al., 2020); (Junaedi & Salistia, 2020); (Zhao et al., 2020))

## **5. Conclusions and suggestions**

### *5.1. Conclusions*

Based on the results of statistical tests obtained the following results:

1. Foreign Direct Investment has a significant and positive influence on the Development of the Indonesian Capital Market.
2. Exchange Rates have a significant and positive influence on the Development of the Indonesian Capital Market.
3. Interest Rates have a significant and negative influence on the Development of the Indonesian Capital Market.
4. The Dow Jones Stock Market Index has a significant and positive influence on the Development of the Indonesian Capital Market.
5. The Covid-19 pandemic has a significant and negative impact on the Development of the Indonesian Capital Market.

### *5.2. Suggestions*

The suggestions that can be submitted are:

1. Due to the importance of the flow of foreign investment into Indonesia in order to increase the development of the capital market which in the future can have implications for economic growth in the form of employment and income per capita, it is therefore recommended that the government is

expected to conduct a review and analysis of investment development domestic investors to foreign investors, unifying various policies that affect the investment climate, making increasing investment contributions to productivity growth and sustainable inclusiveness and presenting the efforts and results of investment in Indonesia so far to the international arena. All of that is in order to attract more foreign investment from foreign countries.

2. There are several things that can be considered by policy makers in dealing with the weakening of the rupiah exchange rate and economic instability due to the pandemic, namely the government must be aware of the increase in the prices of the basic needs of the community, among others by promoting the use of local or domestic production in meeting the basic needs of the community. Start limiting imports of consumer goods, importing oil and increasing exports so that there is a balance. However, there is a positive side to a weak exchange rate, among others, investment in Indonesia becomes cheaper in the eyes of foreign countries, which in turn can trigger foreign investment. In addition, the weakening rupiah made the prices of local products more competitive (cheaper) in the global market. When compared to other countries, Indonesia is not the only country whose currency exchange rate has weakened against the Dollar. Some developed countries such as Canada, Japan, Europe also experienced it.
3. The Covid-19 pandemic has had a significant impact on the Indonesian economy, the government is advised to take a mix of economic policies, both fiscal and monetary policies, to restore stability to the Indonesian economy, which can have implications for the development of the Indonesian capital market, which in turn can increase employment and increase income. per capita. Things that can be taken include firstly accelerating treatment and wider transmission, secondly maintaining people's purchasing power by reducing the burden of costs that are directly under the government's control, including reducing electricity, telecommunications, fuel, gas and clean water tariffs, third the need for supervision and equitable distribution of social assistance distribution for people in need.

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